WHAT IS CLAIMED IS:

1. An object monitoring apparatus comprising:

a movable lens;

first means for converting an image, represented by light passing through the lens, into a video signal;

second means for detecting a moving object in an image represented by the video signal generated by the first means;

third means for, when the second means detects a moving object, moving the lens to change an in-focus position, on which a combination of the lens and the first means is focused, among predetermined positions different from each other;

fourth means for detecting degrees of focus of images represented by video signals which are generated by the first means when the in-focus position coincides with the predetermined positions respectively;

fifth means for deciding a greatest of the focus degrees detected by the fourth means; and

sixth means for indicating the video signal representing the image having the greatest focus degree decided by the fifth means.

2. An object monitoring apparatus comprising:

a movable lens;

first means for converting an image, represented by light passing through the lens, into a video signal;

second means for moving the lens to change an in-focus

position, on which a combination of the lens and the first means is focused, among predetermined positions different from each other;

third means for analyzing frequencies of video signals which are generated by the first means when the in-focus position coincides with the predetermined positions respectively;

fourth means for deciding a highest of the frequencies analyzed by the third means; and

fifth means for indicating the video signal having the highest frequency decided by the fourth means.

3. An object monitoring apparatus comprising:

a movable lens;

first means for converting an image, represented by light passing through the lens, into a video signal;

second means for moving the lens to change an in-focus position, on which a combination of the lens and the first means is focused, among predetermined positions different from each other;

third means for analyzing frequencies of video signals for each of different bands, said video signals being generated by the first means when the in-focus position coincides with the predetermined positions respectively;

fourth means for detecting a frequency component difference among the video signals from results of said analyzing by the third means for each of the different bands;

fifth means for deciding a greatest of the frequency component differences detected by the fourth means and

corresponding to the respective different bands;

sixth means for detecting frequency components in the respective video signals for the band corresponding to the greatest frequency component difference decided by the fifth means from the results of said analyzing by the third means;

seventh means for deciding a highest of the frequency components detected by the sixth means; and

eighth means for indicating the video signal having the highest frequency component decided by the seventh means.

4. An object monitoring apparatus as recited in claim 1, wherein the first means comprises light receiving units arranged in a lattice, expansion-contraction members connecting the light receiving units, a CCD-based photoelectric conversion device for converting light received by the light receiving units into an electric signal, and means for expanding and contracting the expansion-contraction members to change an effective light receiving area covered by the light receiving units.

5. An object monitoring apparatus comprising:

a combination lens including segments having different focal points respectively;

condensers for condensing light beams passing through the segments of the combination lens, respectively;

first means for converting the light beams condensed by the condensers into video signals, respectively;

second means for detecting frequency components in the video signals generated by the first means, respectively;

third means for deciding a highest of the frequency components detected by the second means; and

fourth means for indicating the video signal having the highest frequency component decided by the third means.

6. An object monitoring apparatus as recited in claim 5, further comprising an optical fiber cable for guiding the light beams condensed by the condensers to the first means.

7. An object monitoring system comprising a set of object monitoring apparatuses arranged to monitor surroundings of a rectangle, wherein each of the object monitoring apparatuses includes the object monitoring apparatus of claim 5.

8. An object monitoring apparatus comprising:

a camera generating a video signal;

first means for deciding whether a moving object is present in or absent from an image represented by the video signal generated by the camera;

second means responsive to a result of the deciding by the first means for, in cases where the first means decides that a moving object is present in an image represented by the video signal, changing an in-focus position, on which the camera is focused, among predetermined positions including at least first and

second predetermined positions;

third means for detecting a first degree of focus of an image represented by a first video signal which is generated by the camera when the in-focus position coincides with the first predetermined position;

fourth means for detecting a second degree of focus of an image represented by a second video signal which is generated by the camera when the in-focus position coincides with the second predetermined position;

fifth means for deciding a greatest of the first and second focus degrees detected by the third and fourth means;

sixth means for selecting one from among the first and second video signals which represents the image having the greatest focus degree decided by the fifth means; and

seventh means for displaying the video signal selected by the sixth means.

9. An object monitoring apparatus as recited in claim 8, wherein the third means comprises means for subjecting the first video signal DCT to generate first DCT coefficients, means for summating squares of DCT coefficients selected from among the first DCT coefficients to generate a first summation result, and means for detecting the first focus degree in response to the first summation result; and wherein the fourth means comprises means for subjecting the second video signal DCT to generate second DCT coefficients, means for summating squares of DCT coefficients

selected from among the second DCT coefficients to generate a second summation result, and means for detecting the second focus degree in response to the second summation result.